

RECORD COPY

**CAL ARNGR 385-95
C-1**

**STATE OF CALIFORNIA
OFFICE OF THE ADJUTANT GENERAL
2829 Watt Avenue
P.O. Box 214405
Sacramento, California 95821-0405**

**Change
No. 1**

12 July 1990

**Safety
ARMY AVIATION ACCIDENT PREVENTION**

1. CAL ARNGR 385-95, 5 July 1989, is changed as follows:

a. Change title to read "Army Aviation Accident Prevention"

b. Add paragraph 2-3 as follows:

2-3 (ADD) Unit and AASF/AAFA commanders will develop an aviation accident prevention program tailored to the needs of their unit/facility. This program will include an accident prevention plan which will designate responsible individuals for each of the accident prevention functions. The program will also include an SOP that explains how the accident prevention functions are to be accomplished. NGB PAM 35-95, The Army National Guard Aviation Accident Prevention Plan, may be used as a guide.

c. Change first sentence of paragraph 2-5a(1) to read "CAAO will schedule an annual survey of each ARNG annual training site airfield."

d. Paragraph 2-5a(2) is superseded 2-5a(2) as follows:

2-5a (2) (ADD) Survey team members will include aviation safety officers of the sites other than the one being surveyed. An exit briefing will be conducted for the site commander, and a written report will be submitted within 10 working days thru CAAO to the site commander. Discrepancies found will be entered on the site safety hazard log by the site safety officer and corrected as resources permit.

e. Add the following to paragraph 2-5a(4).

An Aviation Resources Management Survey (ARMS) fulfills the requirements for one of the semi-annual surveys for the unit and facility surveyed.

f. Add the following to paragraph 2-5a(5).

Hazards or potentially hazardous situations found on any inspection or survey will be promptly entered on a hazards inventory log.

g. Add the following to paragraph 2-7d.

The Safety Council will identify and analyze systemic problems. Countermeasures will be developed to control or eliminate each systemic hazard identified. Council minutes will track each systemic problem through its resolution, indicating a responsible individual and whether the item is open or closed.

h. Add the following to paragraph 2-7e.

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The Enlisted Safety Council will identify safety hazards and make recommendations for resolution to the Aviation Safety Council.

- i. Add the following to paragraph 2-7f.

A State Aviation Safety Council will be appointed on orders. The council will consist of the full-time CAAO ASO, the STARC ASO, and the IP/ASO's from each AASF/AAFA. ASO's from aviation units will be invited to attend pending availability of funding. The council will meet semiannually.

- j. Paragraph 2-8f is superseded as follows:

2-8f. A safety briefing will be given to aviators prior to the commencement of operations during an annual training period. A roster of crew members attending and an outline of subjects briefed will be maintained to ensure 100% participation. The checklist in the appendix will be used for guidance in developing the briefing.

- k. Add paragraph 2-8f.1 as follows.

Annual training and FTXs/ARTEPs are vulnerable periods. Rather than relax, we must concentrate even more on basic safe flying operations. Aircrews must insure they do not exceed their capabilities. Tactical training missions are secondary to safety when marginal flying conditions exist.

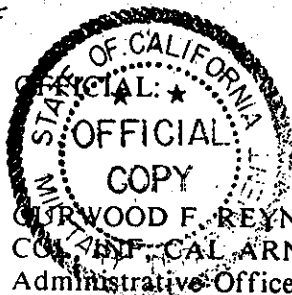
- l. In paragraph 2-9(6)(b) change "AASF/AAFA" to read "unit"

- m. Add the attached Appendix, AT/FTX Briefing Checklist

2. File this change in front of the publication for reference purposes.

(CAAO)

BY ORDER OF THE GOVERNOR:



ROBERT C. THRASHER
Major General
The Adjutant General

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STATE OF CALIFORNIA
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CAL ARNG Regulation
No. 385-95

5 July 1989

Safety

ARMY AVIATION: ACCIDENT PREVENTION AND FLIGHT REGULATIONS

Summary. This regulation establishes Army Aviation accident prevention program of the CAL ARNG. It is to be used with AR 385-95. References in this regulation are to the AR 385-95, unless otherwise annotated.

Supplementation. Supplementation of this regulation is prohibited without prior approval of CAAO.

Interim Changes. Changes to this regulation will be issued with instructions for posting. Consecutive numbered changes will be issued in the form of complete pages. Interim changes are not official unless authenticated by the Office of the Adjutant General. Interim changes will remain in effect until superseded or rescinded.

Suggested Improvements. Recommendations for changes to this regulation are encouraged. These recommendations will be made in writing through command channels to CAAO. Changes resulting from State Standardization Conferences will be incorporated into this regulation on an annual basis.

Gender. Whenever the word "he" is used in this regulation, it is intended to include both the masculine and feminine gender, unless otherwise indicated.

CAAO. CAAO refers to the Director, Army Aviation, Office of the Adjutant, which is the proponent for this regulation.

CHAPTER 2

GENERAL

Aviation Accident Prevention Survey.

2-5a (1) (ADD) CAAO will schedule a semiannual survey of each ARNG annual training site airfield and AASF/AAFA. Surveys will be completed in sufficient time to allow corrective action before units occupy the airfield for their AT period. A copy of the most recent survey will be prominently displayed in Flight Operations.

2-5a (2) (ADD) Survey team members will include aviation safety officers of the site not being surveyed. An exit briefing will be conducted for the site commander, and a written report will be submitted within 10 working days thru CAAO to the site commander. Discrepancies found will be corrected as resources permit.

2-5a (3) (ADD) When applicable, the most current edition of the "Guide to Aviation Resources Management for Aircraft Mishap Prevention", published by the USASC, will serve as a check list.

2-5a (4) (ADD) The annual Regional Accident Prevention Survey (RAPS) fulfills the AASF/AAFAs requirements for one of the semiannual surveys.

2-5a (5) (ADD) The procedures stated in this program do not relieve commanders and aviation safety officers of the responsibilities for systematically spot checking areas on a regular basis. Appropriate records of these spot surveys should be maintained.

Aviation Safety Council.

2-7d (ADD) The purpose of the Aviation Safety Council is to promote accident prevention at the unit level. Each unit/section having organic aircraft will establish an Aviation Safety Council. Members of the council will be placed on orders and will meet a minimum of once a quarter. A record of the meeting minutes will be maintained in the unit files, with an information copy sent to the AASF/AAFA and CAAO.

2-7e (ADD) Enlisted Aviation Safety Council.

(1) The purpose of the Enlisted Aviation Safety Council is to integrate enlisted members of the unit into the safety program and to capitalize on their experience. Each unit/section having organic aircraft will establish an Enlisted Aviation Safety Council. Members of the council will be placed on unit orders and will meet a minimum of once a quarter. A record of events of the meeting will be maintained in the unit files and an information copy forwarded to the AASF/AAFA.

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(2) The council will include the first sergeant (or aviation section sergeant), maintenance sergeant, operations sergeant, platoon sergeants and other members of the unit, as desired. The council will generally be comprised of the senior NCOs, but E5's and below should may be appointed.

2-7f (ADD) Detachment Aviation Council. Detachments, because of size, will combine the Aviation Safety Council and the Enlisted Aviation Safety Council as one body.

2-8f (ADD) A safety briefing will be given to aviators within the first two days of operations at a field training site. The following is a minimum list of items that should be covered:

- (1) Performance planning.
- (2) Cause and awareness of density altitude and its effect on an aircraft.
- (3) Computation of weight and balance information.
- (4) Survival equipment to be carried.
- (5) Minimum hovering where a dust problem could exist.
- (6) Checking on range status prior to departure. Monitoring range control frequency.
- (7) Passenger/troop briefings.
- (8) Crewmember requirements for open cabin door flying in UH-1/OH-58/UH-60.
- (9) Reduced endurance (increased drag) when flying with UH-1/UH-60 cargo doors open or OH-58 doors removed.
- (10) Aircraft avoidance procedures for other aircraft, especially in areas without positive control.
- (11) Equipment security in the aircraft.
- (12) Night AT training site and airfield checkout. Aviators must receive a night checkout at an AT training site from which they are operating, and a gradeslip for this checkout must be kept on file in the operations office, prior to the aviator acting as Pilot-in-Command of an aircraft at night. Any aviator who has had this checkout may administer the checkout to another.
- (13) Checking on refueling procedures at each intended fueling stop and FARE system.

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(14) Exercising caution while flying in a tactical environment. Commo wire (WD-1) and antennas appear overnight or within hours and may be strung in trees.

(15) Ground and vehicle safety are an important aspect of the overall safety program. FOD control is everyone's responsibility.

(16) Tool control and inventory are an important contribution that all mechanics can make to the safety program.

(17) Conduct of terrain flights, external load, hoist operations and aerial gunnery.

(18) Night Vision Goggle (NVG)/Night Vision System (NVS) operations.

(19) Crew endurance requirements.

(20) Annual training and FTXs/ARTEPs are vulnerable periods. Rather than relax, we must concentrate even more on basic safe flying operations. Aircrews must insure they do not exceed their capabilities. Tactical training missions are secondary to safety when marginal flying conditions exist.

2-8g (ADD) A makeup briefing will be given to crewmembers who missed the initial briefing. The unit safety officer will maintain a roster of those who participated in the briefings.

Aviation Safety Meetings.

2-9 (6) (a) (ADD) An informal aviation safety meeting/briefing will be held by all aviation units/sections/detachments at the beginning of each IDT period. All aviators and crewmembers present at the MUTA will attend. The meeting should be brief and be conducted with maximum crew participation.

2-9 (6) (b) (ADD) An aviation safety meeting will be coordinated and conducted by the AASF/AAFA safety officer, at least quarterly and is mandatory for all aviators, crewmembers and non-crewmembers on flight status, including active duty personnel. Units will plan these on their training schedules.

(1) Alternate dates for each meeting will be scheduled. Personnel missing the meeting will not be allowed to fly until they have been briefed on the topics presented at the meeting. A sign-in roster of attendees and a copy of the schedule of events will be maintained in the AASF/AAFA files with a copy furnished to the individual unit commanders.

(2) These meetings will be informal, informative and not restricted in duration.

(3) CAAO will be notified of the time, date and location of these meetings.

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2-9 (6) (c) (ADD) CAAO will sponsor an annual safety conference as funding permits. Ideally, these will occur prior to the core annual training periods.

2-17i (ADD) Each major command is on the distribution list of USASC for safety publications. If more copies are needed, write directly to the U.S. Army Safety Center, Ft. Rucker, AL 36362. Direct communication with USASC is authorized by AR 10-29.

2-17j (ADD) Each AASF/AAFA will maintain a reading file of all aviation safety literature. The file will include aircraft operator manuals and ATMs for each type aircraft assigned. This material will be made accessible to aviation personnel.

2-17k (ADD) Two aviation safety bulletin boards, one in flight operations and one in maintenance, will be established at the AASF/AAFA. These will be located where flight crews and mechanics will see them daily. Information placed on these boards will be current and beneficial to aviation and maintenance personnel.

2-17l (ADD) A list of publications recommended for safety reference libraries is contained in the "Commanders Aviation Prevention Plan". This plan is available to units from USASC.

2-18d (ADD) Pre-accident plan. A pre-accident plan will be established by each AASF/AAFA, units having organic aviation assets and each ARNG airfield, including Camp Roberts and Camp San Luis Obispo. This plan will be tested at least annually and documentation recorded and a copy forwarded to CAAO, 10 working days after the test.

2-18e (ADD) Aircraft accident reports, investigations and release of information. Any aircraft accidents/incidents involving property damage, injury or loss of life will be reported immediately. The senior Army aviator or senior person not incapacitated, or if all persons are incapacitated, the first responsible individual having knowledge of the mishap will notify the nearest AASF/AAFA or the OTAG SDO.

2-18f (ADD) The officer in Charge, unit, facility or OTAG SDO, (or his representative) at the time of the mishap will:

- a. Initiate search and rescue efforts.
- b. Notify the OTAG Staff Duty Officer at the EOC and submit an SIR.
- c. Notify the facility commander.
- d. Notify CAAO and provide the following information:

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1. Mishap Data: Date, Time, ACFT Number
2. Unit of ACFT/aircrew:
3. POC:
4. Phone No: AUTOVON and Commercial
5. Type ACFT/Serial No:
6. Location:
7. Hazardous/Sensitive Item(s) on board:
8. Weather conditions:
9. Flight Conditions:(circle one) DAY/NIGHT/VFR/IFR/NOE/NVG
10. Number of personnel on ACFT:
OFF: WO: EM: CIV:
11. Ranking officer on ACFT:
12. Injuries:
13. Brief synopsis:

e. Provide mishap site security until the responsibility is transferred or wreckage is released by the USASC team chief.

f. Refer all media enquires to the OTAG Public Affairs Officer.

CAAO will:

a. Arrange to brief the Adjutant General, Assistant Adjutant General and appropriate OTAG staff on all known data relating to the mishap.

b. Coordinate with the OTAG PAO concerning all information provided to the media.

c. Notify NGB and the US Army Safety Center (USASC) by telephone when a class A, B, or C mishap occurs. The following information will be passed to NGB and USASC:

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1. Items 1-3 of paragraph d above.
 2. Nearest airfield which can handle a C-12 acft.
 3. Nearest airfield with commercial air service.
 4. POC for the USASC team.
- d. Appoint an aviation safety officer to act as a POC for the USASC investigation team.
- e. Appoint an Aviation Accident Investigation Board (AAIB), to include the members from the USASC. Ensure that orders are published for all members of the AAIB.
- f. Make arrangements for administrative support for the USASC team.
- g. Contact the environmental POC at CAFE-PM with a list of the hazardous materials, if any, and the type and amount of fuel and lube oil on board the acft.
- h. Ensure that the wreckage remains undisturbed until released by USASC.
- i. Mandays/funds for security to be coordinated with the appropriate staff element.
- j. Appoint collateral investigation board.
- k. Coordinate arrangements for covering cost of support, except that of USASC.
- l. Coordinate wreckage recovery efforts.
- m. Notify SPMO of any AGR or technician personnel injured or killed.
- n. Coordinate with CAMP-SB, SGLI and other casualty actions.
- o. Provide copies of all appropriate documents CAMP-SB concerning injuries or deaths.
- p. Ensure:
1. Search and rescue effort are initiated, if required.
 2. Security of the crash site is coordinated with the appropriate command or directorate.
 3. That the next of kin notification process command and chaplains office, has been initiated.

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4. That any additional logistic support requirements are accomplished.

5. If required, tear down analysis is coordinated with the appropriate agency/unit.

6. That the AASF/AAFA impounds all aviation records and the unit(s) impound all health records pertaining to the aircraft and crew as appropriate.

7. If required, a casualty assistance officer is appointed by the appropriate unit.

8. If required, information on memorial services is passed to the DAG.

9. If required, coordinate the letters of condolence to the next of kin with the DAG administrative assistant.

10. If required, coordinate crisis/psychological assistance for survivors and unit members.

(CAAO)

BY ORDER OF THE GOVERNOR:

OFFICIAL:

ROBERT C. THRASHER
Major General
The Adjutant General

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APPENDIX
AT/FTX BRIEFING CHECKLIST

A-1. AVIATION: (Note: During this briefing, it is an excellent time to integrate this with other areas. For example, the quarterly accident review can be shown to enhance accident awareness in a positive way. It can be related to the ATM and various FM's and TC's like night flying or NOE flight as a form of review. The key consideration, however, is to allow sufficient time to do the briefing and conduct it in a timely manner not more than one month prior to leaving. In addition, try to use other subject matter experts to give portions of the briefing, as you do not have to do it all yourself. The use of graphics is helpful. A reduced outline as a handout, synthesized from your presentation, given to all crewmembers, will help reinforce your key points.)

a. Crew/Flight - Pilots, AO's, CE's, FE's, etc.

Route of flight

Environmental differences may change aircraft performance/PPC updates

Severe weather/mooring and tie-down procedures

commo procedures

check points

Crew brief/Pax brief

PPC/weight and balance

Risk assessment

Briefings (Chain of Command)

who can sign briefing sheets approval of high risk missions

Crew endurance

Fuel (FARP)/SOP review

Ground guide signals

Maintenance - hostile field environment/inlets/blades/FOD

Tail rotor/main rotor operations

By-the-book/Use of checklists

Professionalism/maturity factor

b. Flight

Routes to field site/parking of aircraft

Night flight considerations/SOP

NOE - hazards maps, wires, towers, etc.

IMC review

Aircrew coordination - include narrated crewmembers

Fireguards/clear aircraft

Bring reference/study materials, i.e., ATM, regs, etc.

NVG operations - corridors, airspace management

c. ALSE

Survival items/knowledge

PRC 90 review/ELT

Adjust helmet/vest content/aviator handbook

Delegate responsibilities at crew brief

AT medical pack - band-aids, aspirin, etc.

APPENDIX (continued)

d. Accident Actions

- Crew activities/responsibilities/meeting area
- Crash plan familiarization/orient to local situation
- Crash grip maps
- PRAM sheet familiarity
- Public Affairs into after an accident
- Sample wallet handout for accident actions

A-2. AIRCRAFT MAINTENANCE: (can also be used for general maintenance)

a. General

- By-the-book maintenance
- Problems in relation to field training
- Crew endurance/rest
 - time sheets for documentation
 - limit extra duties
- Supervision - communications with subordinates
 - assign work realistically
 - check work
 - assign work based on capabilities
- POL operations
 - review SOP, fuel samples and materials
 - spill and cleanup procedures/reporting requirements
- Operations and maintenance dialogue
 - mission ready status sheet
- Severe weather
 - equipment needed, aircraft evacuation procedures
 - aircraft mooring procedures/tie-downs
- Predilection review of maintenance responsibilities

b. Operational

- FOD/tool accountability
 - FOD collection procedures
- Moving aircraft
- Use of work stands, jacking aircraft
- Test flights - areas, crew selection
- Personal protective equipment (PPE)
- APU operations, Herman Nelson headers, generators
- Marking of parking areas for aircraft
 - survey LZ's/operations areas
- Hazards in area